

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2004/002688

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 HOIL 33/00**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 HOIL HOIS

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and application for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

e-KIAPSS "InGaN", "NITROGEN", "GROW"

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2004- 95724 A (NIPPON TELEGR. & TELEPH. CORP. <NTT> ) 25 MARCH 2004 see the abstract, claims 1-5, the embodiment 1 (paragraph [0028]-[0064])	1 - 23
A	US 2004/0026699 A1 (JOHANNES BAUR et. al. ) 12 FEBRUARY 2004 see the abstract, figure 1a	1 - 23
A	JP 9-36429 A ( SUMITOMO CHEM. CO. LTD.) 7 FEBRUARY 1997 see the abstract, embodiment 1, figures 1-2	1 - 23
A	US 5864573 A ( SUMITOMO ELECTRIC INDUSTRIES LTD. ) 26 JANUARY 1999 see the whole document	1 - 23
A	EP 1403910 A2 ( CHIBA UNIVERSITY ) 31 MARCH 2004 see the whole document	1 - 23

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

O " document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

11 MAY 2005 (11.05.2005)

Date of mailing of the international search report

12 MAY 2005 (12.05.2005)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

KIM, Dong Yup

Telephone No. 82-42-481-5749



# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2004/002688

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2004- 95724 A	25 03.2004	EP 1389814 A2 EP 1389814 A3 > 16022969 A JP 16022970 A KR 1020040002471 US 2003234404 A 1	18.02.2004 26.01.2005 22.01.2004 22.01.2004 07.01.2004 25.12.2003
US 2004/0026699 A 1	12 02.2004	EP 1299909 A 1 DE 10032246 A 1 JP 2004503096 T 2 TW 518770 B WO 0203479 A 1	09.04.2003 17.01.2002 29.01.2004 21.01.2003 10.01.2002
JP 9-36429 A	07.02.1997	NONE	
US 5864573 A	26.01.1999	JP 08293473 A	05.11.1996
EP 1403910 A2	31.03.2004	JP 2004140339 A CA 2441877 A 1 CN 1497743 A KR 1020040027390 A US 6856005 BB US 20040108500 A 1	13.05.2004 25.03.2004 19.05.2004 01.04.2004 15.02.2005 10.06.2004